Evidence Tables

Evidence Table 1 – RCTs and CCTs reporting on Athletic Performance Enhancement with Ephedra

First Author Year	Design Study Quality Population (>75 Comorbidities	^(%)	Arm	Intervention Total Daily Dose Route of Administration #Duration	Sample Size		Summary of Results
Bell DG & Jacobs I 1999 #24	CCT Jadad Score: Population: Comorbidities:	1 Male athletes N/A	2	Placebo Placebo for 2 days Ephedrine 75 mg orally for 2 days Caffeine 375 mg orally for 2 days	n Entered: n Analyzed: n Entered: n Analyzed:	9 9 9	VO ₂ maximum during the treadmill runs, VO ₂ at standard running velocities, and the relationship between the heart rate and the VO ₂ were similar in both the Caffeine and Ephedrine (C+E, Arm 2) and the Placebo (Arm 1) groups. Run times of the performance test for subjects in the C+E group (Arm 2) was significantly faster (p < 0.05) than for subjects
Bell DG, Jacobs I, et al. 1999 #25	CCT Jadad Score: Population: Comorbidities:	1 Male N/A	2 3	Control No dosage data reported Placebo Placebo for 1 day Ephedrine 1 mg·kg-1 orally for 1 day Caffeine 5 mg·kg-1 orally for 1 day	n Entered: n Analyzed: n Entered: n Analyzed: n Entered: n Analyzed:	10 10 10 10 10	in the Placebo group (Arm 1). Individuals in the Caffeine and Ephedrine (C+E) group (Arm 3) experienced a significant VO 2 increase of 7.5% compared to individuals in the Placebo group (Arm 2), but similar to individuals in the Control group (Arm 1). Tolerance times were similar for the C+E (Arm 3, 121.3 +/- 33.9 minutes) and Placebo (Arm 2, 120.0 +/- 28.4) groups, but significantly longer than the Control group (Arm 1, 106.6 +/- 24.0).
Bell DG, Jacobs I, et al. 2000 #26	CCT Jadad Score: Population: Comorbidities:	3 Male N/A	3	Placebo Placebo for 1 day Ephedrine 0.8 mg·kg-1 orally for 1 day Caffeine 5 mg·kg-1 orally for 1 day Caffeine 1 mg·kg-1 orally for 1 day Caffeine 4 mg·kg-1 orally for 1 day Ephedrine 0.8 mg·kg-1 orally for 1 day Caffeine 4 mg·kg-1 orally for 1 day Caffeine 4 mg·kg-1 orally for 1 day	n Entered: n Analyzed: n Entered: n Analyzed: n Entered: n Analyzed: n Entered: n Analyzed:	12 12 12 12 12 12 12 N/A N/A	VO ₂ maximum was similar among all groups. Endurance ride times to exhaustion for all Caffeine and Ephedrine groups with different dosages (Arm 2, 27.5 +/- 12.4 minutes; Arm 3, 27.6 +/-10.9; and Arm 4, 28.2 +/- 9.3) were similar, and significantly greater than Placebo (Arm 1, 17.0 +/- 3.0) with an approximated 64% improvement.

Evidence Table 1 – RCTs and CCTs reporting on Athletic Performance Enhancement with Ephedra (continued)

	Design			Intervention						
	Study Quality			Total Daily Dose						
First Author	Population (>75	5%)		Route of Administration						
Year	Comorbidities		Arm	# Duration	Sample Size		Summary of Results			
Bell DG,	ССТ		1	Placebo	n Entered:	12	VO ₂ maximum increased progressively during			
Jacobs I, et al.		4		Placebo for 1 day	n Analyzed:	8	exercise in all trials (Arms 1, 2, 3, and 4, p < 0.05),			
1998 #27	Population:	Male	2	Ephedrine	n Entered:	12	but no significant difference was found among them.			
	Comorbidities:	N/A		1 mg·kg-1 orally for 1 day Caffeine	n Analyzed:	8	Time to exhaustion was significantly longer for the Caffeine and Ephedrine trial ((Arm 2) when compared to Placebo (Arm1) and Caffeine (Arm 3) trials (p <			
			3	1 mg·kg-1 orally for 1 day	- F-tl	12	0.05).			
			3	Caffeine	n Entered:		0.03).			
				5 mg·kg-1 orally for 1 day	n Analyzed:	8				
			4	Ephedrine	n Entered:	12				
Dall DC	COT		1	1 mg·kg-1 orally for 1 day	n Analyzed:	8	A course date d V/O			
Bell DG,	CCT	4	1	Placebo	n Entered:	24	Accumulated VO ₂ was similar between all groups.			
Jacobs I, et al.	Jadad Score:	1		Placebo for 1 day Caffeine	n Analyzed:	24	The Ephedrine (Arm 3) and Caffeine plus Ephedrine			
2001 #512	Population:	Military	2		n Entered:	24	(Arm 4) treatments increased power output			
	Comorbidities:	N/A	ļ	5 mg·kg-1 orally for 1 day	n Analyzed:	24	significantly (p < 0.05) early in the Wingate test			
			3	Ephedrine	n Entered:	24	compared to the Placebo (Arm 1) and Caffeine (Arm			
			ļ <u>.</u>	1 mg·kg-1 orally for 1 day	n Analyzed:	24	2) treatments. Caffeine-containing treatments (Arms 2 and 4) significantly improved times to exhaustion by			
			4	Ephedrine	n Entered:	24	8% compared to non-caffeine treatments (Arms 1 and			
						1 mg·kg-1 orally for 1 day Caffeine 1 mg·kg-1 orally for 1 day	n Analyzed:	24	3).	
Oksbjerg N,	CCT		1	Ephedrine	n Entered:	6	A thermogenic effect of 4.3 +/- 1.3 watt was			
Meyer T, et al.	Jadad Score:	1		40 mg orally for 1 day	n Analyzed:	6	established for the Ephedrine group (Arm 1), the			
1986 #214	Population:	Male	2	Placebo	n Entered:	6	effect in the Placebo group (Arm 2) was only 1.6 +/-			
Comorbidities:	N/A						No dosage data reported	n Analyzed:	6	1.6. The thermogenic effect in the Ephedrine group (Arm 1) increased by 100% (p < 0.05) following aerobic training. Overall, aerobic training increased VO_2 maximum by 7 % (p < 0.05).
Pasternak 199			1	Placebo	n Entered:	13	For muscular endurance outcomes, mean number of			
#511	Jadad Score:	1		Placebo for 1 day	n Analyzed:	13	leg and bench press repetitions only in the first set			
	Population:	Male	2	Caffeine	n Entered:	13	increased significantly (p < 0.05) for individuals in the			
		athletes	<u> </u>	4 mg·kg-1 orally for 1 day	n Analyzed:	13	Caffeine and Ephedrine (Arm 4) and the Ephedrine			
	Comorbidities:	N/A	3	Ephedrine	n Entered:	13	(Arm 3) groups compared to the Caffeine (Arm 2) and			
			<u> </u>	0.8 mg·kg-1 orally for 1 day	n Analyzed:	13	Placebo (Arm 1) groups. The mean number for all 3			
			4	Caffeine	n Entered:	13	sets of leg and bench repetitions was similar among			
				4 mg·kg-1 orally for 1 day Ephedrine 0.8 mg·kg-1 orally for 1 day	n Analyzed:	13	all groups.			

Evidence Table 1 – RCTs and CCTs reporting on Athletic Performance Enhancement with Ephedra (continued)

First Author Year	Design Study Quality Population (>75 Comorbidities	%)	Arm	Intervention Total Daily Dose Route of Administration # Duration	Sample Size		Summary of Results
Sidney KH &	CCT		1	Placebo	n Entered:		No significant difference was seen between the
Lefcoe NM	Jadad Score:	2		Placebo for 1 day	n Analyzed:		Placebo (Arm 1) and Ephedrine (Arm 2) groups for
1977 #247	Population:	Male	2	Ephedrine	n Entered:	21	any variable including VO 2 maximum, and endurance
	Comorbidities:	N/A		24 mg orally for 1 day	n Analyzed:	21	

	Design			Intervention				
	Study Quality			Total Daily Dose				
First Author	Population (>75	5%)		Route of Administration	0		Meta-analysis Data*	
Year Comorbidities				[‡] Duration	Sample Size		Or Summary of Results	
Astrup A,	CCT	_	1	Placebo	n Entered:	8	Average weight loss at 2 months in kg:	
Buemann B, et		2		Placebo for 8 weeks	n Analyzed:	6	Arm 1 = 8.4 (2.9)	
al. 1992 #9	Population:	Female	2	Ephedrine	n Entered:	8	Arm 2 = 10.1 (1.0)	
	Comorbidities:	Obesity		60 mg orally for 8 weeks Caffeine	n Analyzed:	6		
				600 mg orally for 8 weeks				
Belfie L, Petrie			1	Placebo	n Entered:	N/A	Excluded from meta-analysis due to Insufficient	
H, et al.	Jadad Score:	1		Placebo for 12 weeks	n Analyzed:	10	statistics. At follow up, decreases were seen only in	
2001 #317	Population:	N/A	2	Ephedrine from Ma Huang	n Entered:	N/A	the Ma Huang Supplement group (Arm 2) for mass	
	Comorbidities:	Obesity		60 mg orally for 12 weeks	n Analyzed:	11	(106.0 +/-11.5 to 96.9 +/- 12.1 kg), fat mass (31.3 +/-	
				Caffeine from Guarana	•		5.3 to 25.8 +/- 5.8 kg, p < 0.05), and percent body fa	
				600 mg orally for 12 weeks			(29.4 +/- 3.1 to 26.4 +/- 3.0 %, p < 0.05).	
Boozer CN,	RCT		1	Placebo	n Entered:	84	Average weight loss at 6 months in kg:	
Daly PA, et al.	Jadad Score:	5		Placebo for 24 weeks	n Analyzed:	38	Arm 1 = 2.6 (3.2)	
2000 #34	Population:	Female	2	Ephedrine from Ma Huang	n Entered:	83	Arm 2 = 5.3 (5.0)	
	Comorbidities:	Obesity		86.4 mg orally for 24 weeks	n Analyzed:	45		
				Caffeine from Kola nut				
				196 mg orally for 24 weeks				
Boozer CN,	RCT	_	1	Placebo	n Entered:	32	Average weight loss at 2 months in kg:	
Nasser JA, et	Jadad Score:	5		Placebo for 8 weeks	n Analyzed:	24	Arm 1 = 0.8 (2.4)	
al. 2001 #333	Population:	Female	2	Ephedrine from Ma Huang	n Entered:	35	Arm 2 = 4.0 (3.4)	
	Comorbidities:	Obesity		77.4 mg orally for 8 weeks	n Analyzed:	24		
				Caffeine from Guarana				
	DOT			300 mg orally for 8 weeks			10.75	
Breum L,	RCT	4	1	Dexfenfluramine	n Entered:	53	Average weight loss at 3.75 months in kg:	
Pedersen JK,	Jadad Score:	4 Famala		30 mg orally for 15 weeks	n Analyzed:	43	Arm 1 = 6.9 (4.3)	
et al. 1994 #41	Comorbidities:	Female Obesity	2	Ephedrine	n Entered:	50	Arm 2 = 8.3 (5.2)	
	Comorbidities.	Obesity		60 mg orally for 15 weeks Caffeine	n Analyzed:	38		
				600 mg orally for 15 weeks				
Buemann B,	RCT		1	Placebo	n Entered:	N/A	Average weight loss at 2 months in kg:	
Marckmann P,	Jadad Score:	3		Placebo for 8 weeks	n Analyzed:	16	Arm 1 = 7.1 (2.4)	
et al. 1994 #45	Population:	Female	2	Ephedrine	n Entered:	N/A	Arm $2 = 8.4 (2.4)$	
	Comorbidities:			60 mg orally for 8 weeks	n Analyzed:	16		
		-		Caffeine	•			
				600 mg orally for 8 weeks				

N/A = not available or not applicable * Meta-analysis data reports standard deviation in parentheses.

First Author Year	Design Study Quality Population (>75%) Comorbidities	Intervention Total Daily Dose Route of Administration Arm # Duration	Sample Size	Meta-analysis Data* Or Summary of Results	
Colker, Swain, et al. 2001 #548	Jadad Score: 2 Population: Female Comorbidities: Obesity	1 Placebo Placebo for 8 weeks 2 Ephedrine from Ma Huang Taken orally for 8 weeks Coleus forksohlli Taken orally for 8 weeks	n Entered: 12 n Analyzed: 12 n Entered: 14 n Analyzed: 14	Arm 1 = 0.49 (2.35) Arm 2 = 2.56 (2.35)	
Colker, Torina, et al. 1999 #549	RCT Jadad Score: 1 Population: N/A Comorbidities: Obesity	1 Placebo Placebo for 8 Weeks 2 Ephedrine from Ma Huang 60 mg orally for 8 weeks Caffeine from unspecified herb 600 mg orally for 8 weeks Aspirin 45 mg orally for 8 weeks	n Analyzed: 8 n Entered: 8	Excluded from meta-analysis because of insufficient statistics: study reports weight loss for one group only. The Ephedra, Caffeine, Aspirin, and Exercise (E+C+A+E) group (Arm 3) had a significant reduction in body weight (-3.8 kg, p<0.01) compared to the Ephedra, Caffeine, and Aspirin (E+C+A, Arm 2) and Placebo groups (Arm 1). The E+C+A (Arm 2) group experienced a significant reduction in caloric intake (-680.2 kcal, p<0.05) compared to the other groups.	
Daly PA, Krieger DR, et al. 1993 #68	RCT Jadad Score: 2 Population: Female Comorbidities: Obesity	1 Placebo Placebo for 8 weeks 2 Ephedrine 75 mg orally for 4 weeks Second round of previous intervention 150 mg orally for 4 weeks Caffeine 150 mg orally for 8 weeks Aspirin 330 mg orally for 8 weeks	n Entered: 15 n Analyzed: 13 n Entered: 14 n Analyzed: 11	Average weight loss at 2 months in kg: Arm 1 = 0.7 (2.2) Arm 2 = 2.2 (2.3)	

^{*} Meta-analysis data reports standard deviation in parentheses.

First Author Year	Design Study Quality Population (>75 Comorbidities	%)	Arm #	Intervention Total Daily Dose Route of Administration Duration	Sample Size		Meta-analysis Data* Or Summary of Results
Donikyan LA 2002 #509	RCT Jadad Score: Population: Comorbidities:	4 Male and female Obesity	2	Placebo Placebo for 12 weeks Ephedrine from Ma Huang 72 mg orally for 8 weeks Chromium picolinate 450 mcq orally for 8 weeks Placebo Placebo for 4 weeks	n Entered: n Analyzed: n Entered: n Analyzed:	94 78 93 75	Average weight loss at 3 months in kg: Arm 1 = 3.0 (6.0) Arm 2 = excluded Arm 3 = 7.4 (6.8)
			3	Ephedrine from Ma Huang 72 mg orally for 12 weeks Chromium picolinate 450 mcq orally for 12 weeks	n Entered: n Analyzed:	92 76	
Greenway F, deJonge L, et al. Unpublished #475	RCT Jadad Score: Population: Comorbidities:	2 N/A Obesity	2	Placebo Placebo for 12 weeks Ephedrine from Ma Huang 72 mg orally for 12 weeks Caffeine from unspecified herb 210 mg orally for 12 weeks Phenylalanine 300 mg orally for 12 days	n Entered: n Analyzed: n Entered: n Analyzed:	20 18 20 12	Average weight loss at 3 months in kg: Arm 1 = 0.8 (2.6) Arm 2 = 3.9 (4.0)
Jensen, Dano, et al. 1980 #536	RCT Jadad Score: Population: Comorbidities:	1 N/A Obesity	2	Ephedrine 100 mg orally for 16 weeks Caffeine 275 mg orally for 16 weeks Ephedrine 100 mg orally for 16 weeks	n Entered: n Analyzed: n Entered: n Analyzed:	13	Average weight loss at 4 months in kg: Arm 1 = 9.4 (4.7) Arm 2 = 7.9 (4.7) Arm 3 = 0.5 (4.7)
			3	Placebo No dosage data reported	n Entered: n Analyzed:	17 4	

N/A = not available or not applicable * Meta-analysis data reports standard deviation in parentheses.

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	Design		Intervention	,			
	Study Quality		Total Daily Dose				
First Author	Population (>75%)		Route of Administration			Meta-analysis Data*	
Year	Comorbidities	Arm	# Duration	Sample Size		Or Summary of Results	
Kalman DS,	RCT	1	Placebo	n Entered:	14	Average weight loss at 2 months in kg:	
Colker CM, et	Jadad Score: 3		Placebo for 8 weeks	n Analyzed:	13	Arm 1 = 2.1 (2.4)	
al. 2000 #140	Population: Male	2	Ephedrine	n Entered:	16	Arm 2 = 3.1 (2.4)	
	Comorbidities: Obesity	'	40 mg orally for 8 weeks Synephrine	n Analyzed:	12		
			10 mg orally for 8 weeks Caffeine				
			400 mg orally for 8 weeks Aspirin				
			30 mg orally for 8 weeks				
Kalman,	RCT	1	Placebo	n Entered:	15	Excluded from meta-analysis because of insufficient	
Colker, et al.	Jadad Score: 3		Placebo for 8 weeks	n Analyzed:		statistics: study only reports weight loss in percent.	
2000 #550	Population: N/A	2	Ma Huang/Ephedra	n Entered:		Subjects in the Ephedrine, Synephrine, Caffeine, and	
	Comorbidities: Obesity		20 mg orally for 8 weeks 28 5 mg orally for 8 weeks Caffeine from unspecified herb	n Analyzed:	15	Aspirin (E+S+C+A) group (Arm 2) experienced a significant reduction in body weight (-9%, p=0.05) as well as in percent of body fat (-16%, p<0.001) compared to the Placebo group (Arm 1, -3.8% and -	
			200 mg orally for 8 weeks Aspirin 15 mg orally for 8 weeks			1% respectively). An intragroup difference in fat free mass was seen in both groups: -0.92 kg (p<0.01) in the E+S+C+A group (Arm 2) and -3.47 kg (p<0.05) in the Placebo group (Arm 1).	
Kettle R,	CCT	1	Placebo	n Entered:	45	Average weight loss at 6 months in kg:	
Toubro S, et al.	Jadad Score: 0		Placebo for 6 months	n Analyzed:	37	Arm 1 = 12.8 (6.7)	
1998 #510	Population: N/A	2	Ephedrine	n Entered:	45	Arm 2 = 15.6 (7.1)	
	Comorbidities: Obesit	'	20 mg orally for 6 months Caffeine	n Analyzed:	40		
			200 mg orally for 6 months				
Lumholtz IB,	RCT	1	Ephedrine	n Entered:	63	Average weight loss at 4.5 months in kg:	
Thorsteinsson			120 mg orally for 18 weeks	n Analyzed:	18	Arm 1 = 9.5 (5.3)	
B, et al. 1980	Population: N/A	2	1 1010 010 0	n Entered:	63	Arm 2 = 4.0 (5.3)	
#173	Comorbidities: Obesit	′	No dosage data reported	n Analyzed:	14		

N/A = not available or not applicable * Meta-analysis data reports standard deviation in parentheses.

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Final Anthon	Design Study Quality	04)		Intervention Total Daily Dose			Mata analysis Datet
First Author Year	: opinion (* 1076)		Arm #	Route of Administration Duration	Sample Size		Meta-analysis Data* Or Summary of Results
Malchow-Mollei A, Larsen S, et al. 1981 #177		3 N/A Obesity	2	Placebo Placebo for 12 weeks Ephedrine 60 mg orally for 12 weeks Caffeine 150 mg orally for 12 weeks	n Entered: n Analyzed: n Entered: n Analyzed:	33 31 49 38	Average weight loss at 3 months in kg: Arm 1 = 4.1 (3.5) Arm 2 = 8.1 (3.5) Arm 3 = 8.4 (3.5)
			3	Diethylpropion 37.5 mg orally for 12 weeks	n Entered: n Analyzed:	50 39	
Moheb MA, Geissler CA, et al. 1998 #193		2 Female Obesity	1 2 3 4	Placebo Placebo for 12 weeks Ephedrine 150 mg orally for 12 weeks Ephedrine 150 mg orally for 12 weeks Aspirin 330 mg orally for 12 weeks Ephedrine 150 mg orally for 12 weeks Caffeine 150 mg orally for 12 weeks Ephedrine 150 mg orally for 12 weeks Ephedrine 150 mg orally for 12 weeks Caffeine 150 mg orally for 12 weeks Caffeine 150 mg orally for 12 weeks Aspirin 330 mg orally for 12 weeks	n Entered: n Analyzed: n Entered: n Analyzed: n Entered: n Analyzed: n Entered: n Analyzed:	N/A 32 N/A 32 N/A 32 N/A 32 N/A 32	Average weight loss at 3 months in kg: Arm 1 = 6.2 (3.5) Arm 2 = 7.9 (3.5) Arm 3 = 9.6 (3.5) Arm 4 = 8.8 (3.5) Arm 5 = 8.9 (3.5)

N/A = not available or not applicable * Meta-analysis data reports standard deviation in parentheses.

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Evidence Table 2 – RCTs and CCTs reporting on Weight Loss (continued)

First Author Year	Design Study Quality Population (>75% Comorbidities	a)	Arm #	Intervention Total Daily Dose Route of Administration Duration	Sample Size		Meta-analysis Data* Or Summary of Results
Molnar D, Torok K, et al. 2000 #195		dolescents 2-17) besity	2	Placebo Placebo for 20 weeks Ephedrine 10 mg orally for 1 weeks Second round of previous intervention 30-60 mg orally for 19 weeks Caffeine 100 mg orally for 1 weeks Second round of previous intervention 300-600 mg orally for 19 weeks	n Entered: n Analyzed: n Entered: n Analyzed:	16 13 16 16	Average weight loss at 5 months in kg: Arm 1 = 0.5 (4.3) Arm 2 = 7.9 (6.0)
Norregaard J, Jorgensen S, e al. 1996 #210	Population:	3 N/A Obesity, monary,	1 2	Placebo Placebo for 9 months Ephedrine 60 mg orally for 3 months Second round of previous intervention 40 mg orally for 3 months Third round of previous intervention 20 mg orally for 3 months Caffeine 600 mg orally for 3 months Second round of previous intervention 400 mg orally for 3 months Third round of previous intervention 400 mg orally for 3 months Third round of previous intervention 200 mg orally for 3 months	n Entered: n Analyzed: n Entered: n Analyzed:	80 73 167 152	Excluded from meta-analysis because there was no weight loss outcome, this study addressed weight gain. Subjects in the Ephedrine plus Caffeine group (Arm 2) gained significantly less weight during the firs 12 weeks (Week 3 = p<0.001; Week 6 = p<0.01; Week 12 = p<0.05) than subjects in the Placebo group (Arm 1). Weight gain was simila for both groups after 1 year.
Pasquali R, Baraldi G, et al 1985 #220	Population:	3 N/A Obesity	2 3	Placebo Placebo for 3 months Ephedrine 75 mg orally for 3 months Ephedrine 150 mg orally for 3 months	n Entered: n Analyzed: n Entered: n Analyzed: n Entered: n Analyzed:	21 12 19 7 22 12	Average weight loss at 3 months in kg: Arm 1 = 8.7 (3.5) Arm 2 = 8.7 (2.4) Arm 3 = 10.2 (3.5)

N/A = not available or not applicable

^{*} Meta-analysis data reports standard deviation in parentheses.

	Design			ng on weight Loss (contin			
	Study Quality			Total Daily Dose			
First Author	Population (>75	5%)		Route of Administration			Meta-analysis Data*
Year	Comorbidities	,	Arm #	Duration	Sample Size		Or Summary of Results
Pasquali R,	RCT		1	Placebo	n Entered:	10	Excluded from meta-analysis because crossover
Cesari MP, et	Jadad Score:	2		Placebo for 2 months	n Analyzed:	10	study design. Patients' weight loss was significantly
al. 1987 #223	Population:	Female	2	Ephedrine	n Entered:	10	(p<0.05) more during the Ephedrine treatment (Arm 2
	Comorbidities:	Obesity		150 mg orally for 2 months	n Analyzed:	10	2.41 +/- 0.6 kg.) than during the Placebo treatment (Arm 1, 0.64 +/- 0.05 kg.).
Quaade F,	RCT		1	Ephedrine	n Entered:	45	Average weight loss at 3 months in kg:
Astrup A, et al.	Jadad Score:	3		60 mg orally for 24 weeks	n Analyzed:	35	Arm 1 = 11.7 (5.3)
1992 #230	Population:	Male and		Caffeine			Arm 2 = 10.3 (4.0)
		female		600 mg orally for 24 weeks			Arm $3 = 9.0 (3.6)$
	Comorbidities:	Obesity	2	Ephedrine	n Entered:	45	Arm 4 = 10.2 (5.7)
				60 mg orally for 24 weeks	n Analyzed:	35	Average weight loss at 6 months in kg:
			3	Caffeine	n Entered:	45	Arm 1 = 16.6 (6.8)
				600 mg orally for 24 weeks	n Analyzed:	36	Arm $2 = 14.3 (5.9)$
			4	Placebo	n Entered:	45	Arm 3 = 11.5 (6.0)
				No dosage data reported	n Analyzed:	35	Arm 4 = 13.2 (6.6)
Roed, Hansen,	RCT		1	Ephedrine	n Entered:	70	Average weight loss at 3 months in kg:
et al. 1980	Jadad Score:	3		60 mg orally for 12 weeks	n Analyzed:	49	Arm 1 = excluded
#535	Population:	Male and		Caffeine from Kola nut			Arm $2 = 10.0 (3.5)$
		female		60 mg orally for 12 weeks			Arm 3 = 5.2 (3.5)
	Comorbidities:	Obesity	2	Ephedrine	n Entered:	69	
				60 mg orally for 12 weeks	n Analyzed:	52	
			3	Placebo	n Entered:	69	
				No dosage data reported	n Analyzed:	42	
Toubro S &	RCT		1	Ephedrine	n Entered:	21	Excluded from meta-analysis due to study design:
•		2		60 mg orally for 8 weeks	n Analyzed:	19	ephedrine dose did not vary between arms.
#261	Population:	Female		Caffeine			The mean weight loss achieved during the reduction
	Comorbidities:	Obesity		600 mg orally for 8 weeks			phase was 12.6 kg (95% CI: 10.9-14.3) for the Low
			2	Ephedrine	n Entered:	22	Energy Diet (LED) group (Arm1) and 12.6 kg (CI: 9.9-
				60 mg orally for 17 weeks	n Analyzed:	19	15.3) for the Conventional Diet (CD) group (Arm 2).
				Caffeine			The rate of weight loss was twice as high in the CD
				600 mg orally for 17 weeks			group (Arm 2, 1.6 kg/week, CI: 1.4-1.8) than in the
							LED group (Arm 1, 0.8 kg/week, CI: 0.7-1.0).

N/A = not available or not applicable

^{*} Meta-analysis data reports standard deviation in parentheses.

First Author			Intervention Total Daily Dose Route of Administration				Meta-analysis Data*
Year	Comorbidities	1	Arm a	# Duration	Sample Size		Or Summary of Results
Van Mil E &	RCT		1	Placebo	n Entered:	16	Average weight loss at 5 months in kg:
Molnar D 2000	Jadad Score:	1		Placebo for 20 weeks	n Analyzed:	16	Arm 1 = 1.5 (8.1)
#272	Population:	Adolescents	2	Ephedrine	n Entered:	16	Arm 2 = 8.7 (5.7)
	Comorbidities:	(12-17) Obesity		60 mg orally for 20 weeks Caffeine 600 mg orally for 20 weeks	n Analyzed:	16	

N/A = not available or not applicable * Meta-analysis data reports standard deviation in parentheses.

Acronyms

AEA Adverse events analysis

AHRQ Agency for Healthcare Research and Quality

ARMS Adverse Reaction Monitoring System

BMI Body Mass Index
CCT Controlled clinical trial
CI Confidence interval

CPK isozymes

CPR

Cardio-plumonary resuscitation

CT scan

CVA

Cerebral vascular accident

CVD

Creatine phosphokinase isoenzyme

Cardio-plumonary resuscitation

Computerized tomography scan

Cerebral vascular accident

Cardiovascular diseases

DF Dexfenfluramine

DSHEA Dietary Supplement Health and Education Act

EPC Evidence-based Practice Center FDA US Food and Drug Administration

GAO General Accounting Office

HHS US Department of Health and Human Services

IOC International Olympic Committee

kg kilograms

MB fractions Myocardial band fractions (of CPK isoenzymes)

MI Myocardial infarction

mg milligrams

MRI Magnetic resonance imagery

NCAA National Collegiate Athletic Association

NHANES National Health and Nutrition Examination Survey

NIH National Institutes of Health ODS Office of Dietary Supplements

OTC Over-the-counter

PDF Portable document format
QRF Quality review form
RCT Randomized controlled trial
TEP Technical Expert Panel

VCO₂ Volume of carbon dioxide production VO₂ Volume of oxygen consumption